

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/01

Date Received: 07/19/01

Project: Metro Self Monitor, PO# M66499

Date Extracted: 07/27/01

Date Analyzed: 07/27/01

**RESULTS FROM THE ANALYSIS OF WATER SAMPLE
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M66499 107083-01	0.58	0.48	0.52	0.08
Method Blank	<0.05	<0.05	<0.05	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/02/01

Date Received: 07/19/01

Project: Metro Self Monitor, PO# M66499

QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 107045-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.16	0.13	21 a	0-20
Copper	mg/L (ppm)	0.17	0.14	19	0-20
Nickel	mg/L (ppm)	0.09	0.06	40 a	0-20
Zinc	mg/L (ppm)	0.06	0.06	0	0-20

Laboratory Code: 107045-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	5	0.16	95	102	80-120	7
Copper	mg/L (ppm)	5	0.17	91	99	80-120	8
Nickel	mg/L (ppm)	10	0.09	98	102	80-120	4
Zinc	mg/L (ppm)	5	0.06	112	110	80-120	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	50	105	102	80-120	3
Copper	mg/L (ppm)	50	108	105	80-120	3
Nickel	mg/L (ppm)	100	105	102	80-120	3
Zinc	mg/L (ppm)	50	104	101	80-120	3

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

107083

SAMPLE CHAIN OF CUSTODY

KJ 7-19-01 AI,

Send Report To GERARD A. ThompsonCompany Alaskan Copper WorksAddress 628 S. HANSEN STCity, State, ZIP SEATTLE WA 98134Phone # 206-382-8579 Fax # 206-382-4309SAMPLERS (signature) [Signature]

PROJECT NAME/NO.

PO #

M&RO Self monitor M66499

REMARKS

Page # 1 of 1

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	2 in 1/2				
M66499	01	7/19/01	11:30	H2O	1							✓				

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>GERARD A. Thompson</u>	<u>ACW</u>	<u>7/19/01</u>	<u>12:30</u>
Received by: <u>S. Olan</u>	<u>S. Olan</u>	<u>F&B, Inc</u>	<u>✓</u>	<u>✓</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

August 2, 2001

DUPLICATE COPY

INVOICE #01ACU0802-2

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M66499 - Results of testing requested by
Gerry Thompson for material submitted on July 19, 2001.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc
by Method 6010B @ \$80 per sample \$ 80.00

Amount Due \$ 80.00

FEDERAL TAX ID # (b) (6)

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

August 2, 2001

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on July 19, 2001 from your Metro Self Monitor, PO# M66499 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson
Chemist

Enclosures
ACU0802R.DOC